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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/706,762	11/10/2003	Daniel R. Caldwell	TI-36721 (032350.B574)	7834
23494	7590	10/14/2004	EXAMINER	
TEXAS INSTRUMENTS INCORPORATED P O BOX 655474, M/S 3999 DALLAS, TX 75265			NGUYEN, DUNG V	
			ART UNIT	PAPER NUMBER
			3723	

DATE MAILED: 10/14/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

## Office Action Summary

**Application No.**

10/706,762

**Applicant(s)**

CALDWELL ET AL.

**Examiner**

Dung V Nguyen

**Art Unit**

3723

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☐ Responsive to communication(s) filed on \_\_\_\_.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-20 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-20 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_.
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_.

**DETAILED ACTION**

***Claim Rejections - 35 USC § 102***

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

2. Claims 1-6, 8, 11-16 and 18 are rejected under 35 U.S.C. 102(b) as being anticipated by Melcer (USPN 6,183,341). Melcer inherently discloses a chemical mechanical polishing monitoring system comprising a peristaltic pump 3 operable to delivery a slurry to a polishing pad 6, a controller 7 operable to send a signal to the peristaltic pump 3 based on a desired volumetric flow rate for the slurry, a rotation sensing device 9 coupled to the peristaltic pump 3 and operable to sense a rotation of the peristaltic pump 3, the rotation sensing device 9 operable to generate a signal indicating of the rotation of the peristaltic pump 3, a computer coupled to the rotation sensing device 9 and the controller 7, the computer operable to receive the signal from the controller 7, the rotation sensing device 9 in order to monitor the peristaltic pump 3 during use, wherein the pump 3 comprises a peristaltic pump, wherein the rotation sensing device 9 comprises an encoder. Melcer also discloses a chemical mechanical polishing method comprising sending a signal to a pump 3, delivering a slurry to a polishing pad 6 via the pump, sensing a rotation of the pump 3, generating a signal indicative of the rotation of the pump and comparing the signal in order to monitoring the pump 3 during use (note Fig. 1, col. 1, line 53 to col. 2, line 32, col. 2, line 48 to col. 23).

***Claim Rejections - 35 USC § 103***

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. Claims 7, 9, 10, 17, 19 and 20 are rejected under 35 U.S.C. 103(a) as being unpatentable over Melcer (USPN 6,183,341). Melcer discloses the claimed invention as described above. Melcer does not disclose expressly that the rotation sensing device comprises a tachogenerator, a fiber optic detector or a digital counter. At the time the invention was made, it would have been an obvious matter of design choice to a person of ordinary skill in the art to use a tachogenerator, a fiber optic detector or a digital counter because Applicant has not disclosed that a tachogenerator, a fiber optic detector or a digital counter provides an advantage, is used for a particular purpose, or solves a stated problem. One of ordinary skill in the art, furthermore, would have expected Applicant's invention to perform equally well with an encoder, a tachogenerator, a fiber optic detector or a digital counter because each of them perform the same function of sensing the speed of the pump. Therefore, it would have been an obvious matter of design choice to modify Melcer to obtain the invention as specified in claims 7, 9, 10, 17, 19 and 20.

***Conclusion***

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5. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Togawa et al and Schob are cited to show chemical mechanical polishing system.

6. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Dung V Nguyen whose telephone number is 703-305-0036. The examiner can normally be reached on M-F, 6:30-3:00.

7. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Joseph J Hail can be reached on 703-308-2687. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

8. Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

DVN  
October 13, 2004

  
**DUNG VAN NGUYEN**  
**PRIMARY EXAMINER**